

### Warm Up # 3-2

1) Use the shortcut to expand:

a)  $(x + 3)^4$

b)  $(2x - 5)^3$

2) Do p. 206, # 5.

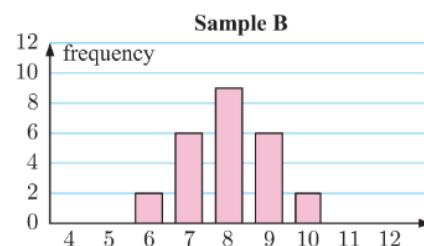
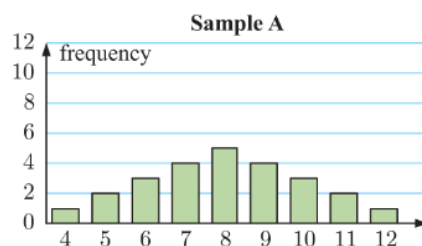
Use grapher to quickly get your 5 point summary.



### HW Questions: p. 203

#### EXERCISE 61.3

1 The column graphs show two distributions:



- By looking at the graphs, which distribution appears to have wider spread?
- Find the mean of each sample.
- Find the standard deviation of each sample. Comment on your answers.

- 2 The number of points scored by Andrew and Brad in the last 8 basketball matches are shown below.

<i>Points by Andrew</i>	23	17	31	25	25	19	28	32
<i>Points by Brad</i>	9	29	41	26	14	44	38	43

- Find the mean and standard deviation of the number of points scored by each player.
- Which of the two players is more consistent?

- 3 Two baseball coaches compare the number of runs scored by their teams in their last ten matches:

<i>Rockets</i>	0	10	1	9	11	0	8	5	6	7
<i>Bullets</i>	4	3	4	1	4	11	7	6	12	5

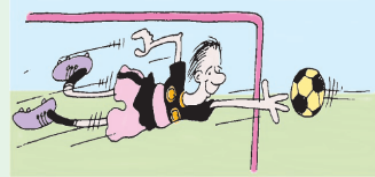
- Show that each team has the same mean and range of runs scored.
- Which team's performance do you suspect is more variable over the period?
- Check your answer to **b** by finding the standard deviation for each distribution.
- Does the range or the standard deviation give a better indication of variability?



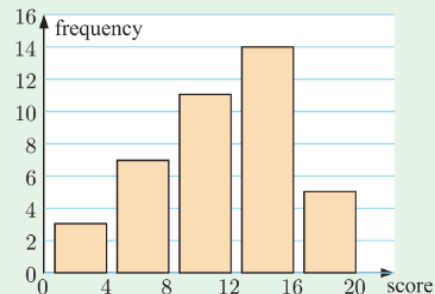
p. 206

**REVIEW SET 6A****1** Classify the following data as categorical, quantitative discrete, or quantitative continuous:

- a** the number of pages in a daily newspaper
- b** the maximum daily temperature in the city
- c** the manufacturer of a television
- d** the preferred football code
- e** the position taken by a player on a lacrosse field
- f** the time it takes to run one kilometre
- g** the length of people's feet
- h** the number of goals shot by a soccer player
- i** the cost of a bicycle.

**3** Find  $a$  given that the data set  $2, a, 5, 4, 1, 2, 3, 5$  has a mean of 3.**4** The column graph shows the marks out of 20 that were scored for a test.

- a** Describe the distribution of the data.
- b** What percentage of the students scored 13 or more marks?
- c** What percentage of the students scored less than 5 marks?
- d** Explain why we cannot display the data in this graph in a box and whisker plot.



- 6** 120 people caught whooping cough in an outbreak. The times for them to recover were recorded and the results were used to produce the cumulative frequency graph shown.

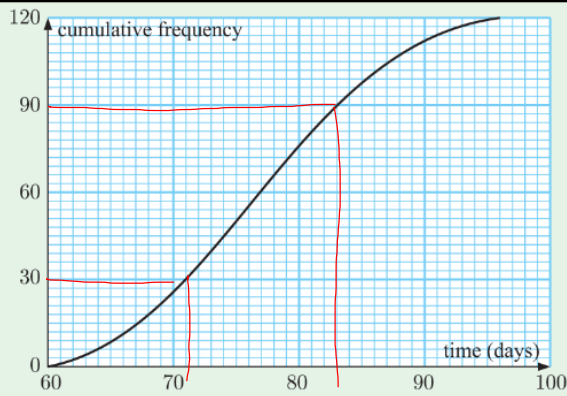
Estimate:

- a** the median
- b** the interquartile range.

$$Q_3 - Q_1$$

$$83 - 71$$

=



- 7** Find, using your calculator, the mean and standard deviation of these sets of data:

**a** 117, 129, 105, 124, 123, 128, 131, 124, 123, 125, 108

**b** 6.1, 5.6, 7.2, 8.3, 6.6, 8.4, 7.7, 6.2

HW:

Rev. Set 6B p. 207, # 4 - 8

Rev. Set 6C p. 208, # 1 - 4, 6

Unit Test: Friday